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ATTACHMENT B

154095

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
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Refer to: L1630200005 -- St. Clair County
Sauget Sites (Area 1, Area 2) -- Sauget
Superfund/Technical Reports

September 6, 1994

Dr. Tom Long
Illinois Department of Public Health
Environmental Toxicology Program
535 West Jefferson Boulevard, Room 500
Springfield, Illinois 62751

Dear Tom:

This is in reference to what we had talked about during our site visit to Site G and Site Q in Sauget with your staff. During our visit, you had indicated that funding may be available to perform limited sampling in flood-impacted areas. After consultation with David Webb, I would like to submit for your review (see enclosure) a proposed sampling plan that would include approximately 17 surface soil samples near Site G and Site Q that have never been investigated.

The justification of these proposed activities is to assess how the flooding has impacted suspected hazardous waste disposal locations and whether or not potential human health exposures are a concern.

As to the personnel involved, IEPA's Collinsville field office would be willing to perform the actual field sampling, while myself and David Webb could be present to assist and provide general direction throughout the project. The soil samples would be sent to ARDL for TCL/TAL analyses and validation. I would estimate that the analytical and validation costs of each soil sample to be about $1,440 for a 30 day turnaround. This would bring the project total to $24,480.

We had tentatively set the sampling dates for two days during the last week of October. The actual sampling date, however will be dependant more on the water levels at the borrow areas in Site Q. Sampling during these dates should be possible as long as there isn't an unusually high amount of rainfall between now and then.

Please review the enclosed detailed proposal that elaborates on the above. If you have any questions or concerns, give me a call.

Sincerely,

Paul E. Takács, Project Manager
National Priorities List Unit
Division of Remediation Management
Bureau of Land

Enclosure - Proposal for IEPA/IDPH Sampling near Site G and Site Q

cc: David Webb, IDPH
Ken Mensing
Terry Ayers
Larry Eastep
Kim Hubbert
Division File

PROPOSAL FOR IEPA/IDPH SAMPLING NEAR SITE G AND SITE Q

I. Background

One of the most highly contaminated areas in Illinois are the Sauget Sites. Area 1 comprises three hazardous waste disposal landfills, a formerly used waste impoundment, two abandoned gravel pits and five intermittent segments of Dead Creek. The contaminants found at the Sauget Area 1 Sites consist mainly of chlorobenzenes, chlorophenols, chloroanilines, nitrophenols, nitroanilines, naphthalene, PCBs and PNAs. These sites were aggregated together on the basis of their relative proximity to each other, shared watershed, nearly identical contaminants, and a common property owner at many of the sites during the periods of disposal. Potential residential exposure to site contaminants is the greatest concern in Area 1. The Area 2 sites comprise four separate sites that include a covered lagoon containing hazardous sludges (Site O), an industrial landfill suspected of containing hazardous wastes (Site P), a closed landfill used by Monsanto for the disposal of their liquid chemical wastes (Site R) and an uncovered closed municipal landfill that accepted hazardous wastes (Site Q). Environmental impacts within wetlands and leachates that flow into the Mississippi River are the more significant concerns of Area 2. Provided below are brief descriptions of the sites that are being proposed for this sampling event:

Site G

A former surface/subsurface hazardous waste disposal site which was originally used as a gravel pit. Site G occupies about 4.5 acres and is littered with demolition debris, metal wastes and corroded drums. Oily and tar-like wastes are found mainly in areas where drums are present; however, most of the landfill is only partially covered with fly ash and cinders. IEPA estimates that there is approximately 22,000 yd^3 of contaminated fill and about 60,000 yd^3 of saturated chemical waste materials. Past surface soil sampling revealed PCBs (74,000ppm total), 1,4-dichlorobenzene (22,000ppm), PCP (21,000ppm), 4-nitrophenol (1000ppm), 2-nitroaniline (220ppm), and PNAs. The primary contaminants detected in subsurface soils included naphthalene (5,429ppm), PCP (4,769ppm) and 4-chloroaniline (231ppm). Access to the site is restricted by a chain-link fence installed by USEPA. Aerial photos show major disposal activities occurring at Site G from the early to mid-1950s to the mid-1960s, after which sporadic disposal occurred until it was fenced in 1982.

On a more recent note, IEPA was informed that an underground fire began at this site in early April and continued through June of this year. IEPA assisted USEPA last June in a sampling event in and around Site G. As would be expected in a scenario of burning PCBs and other chlorophenols, the sample results indicated widespread dioxin contamination on the site and outside the

perimeter of the fence. The levels of 2,3,7,8-TCDD (137ppb) were high enough to justify a time-critical action by USEPA even for an industrial area. An interview with an employee of the property owner said that the Sauget Fire Department was called to put out the fires. This employee noted the burning area was flooded with water 24 hours a day for two weeks, thereby creating a large pond in back of the burn area. Although water samples from the pond did not show contamination, it is suspected that the sediments of the low-lying area to the south of Site G are contaminated. In addition to this area, this site contributed to further contamination of Dead Creek last year during last year's flooding.

Site Q

Site Q, also known as the former Sauget & Company Landfill (e.g. the Sauget Municipal Landfill) had been completely submerged by flooding last summer. There are numerous uncovered waste disposal areas scattered throughout the site. Oil-saturated materials as well as drums with unknown wastes are present at many of these disposal areas. Limited soil sampling has indicated high levels of semivolatiles, pesticides and PCBs. Of greatest concern to IEPA is the presence of several waste piles and drums located in the two borrow pits to the south of the site. No sampling has ever been performed at these locations because they are normally submerged. In addition to these areas, several drums are present along the bank of the river - many of which have been exposed by last year's floods. Recent sampling of these drums showed PCBs (over 200,000ppm), 2-chlorophenol (67ppm), 1,4-dichlorobenzene (49ppm), 1,2,4-trichlorobenzene (52ppm), phenol (71ppm) and 4-nitrophenol (45ppm). There are also various isolated waste disposal areas located throughout the site. This site was operated by Sauget & Company as a "municipal landfill". Aerial photos show major activities beginning in the mid-1950's and continuing through the 1970's. 103(c) notifications to USEPA note that BFI hauled unidentified hazardous wastes and chemicals to this landfill from 1963 to 1970. Another notification points out a massive liquid waste and drum disposal area at an unknown location on this site.

II. General Sampling Information

17 soil samples are planned for both the low-lying area behind Site G and several locations on Site Q that have never been sampled. Concentrations of contaminants are anticipated to be anywhere from low to very high concentrations. Sampling and handling of these samples will be performed in accordance with these anticipated concentrations.

Actual sampling activities will be performed by IEPA's Collinsville office personnel under the general direction of Paul Takacs (IEPA) and David Webb (IDPH). All samples will be placed in an iced cooler and delivered to ARDL, Inc. for same day shipment. Soil samples will be run for TCL/TAL parameters under Superfund protocol. Both IEPA sampling and chain-of-custody procedures will be followed throughout the project. Each sample will be assigned a sample location ID number that will be provided on a sample location map.

III. Sampling Locations and Rationale

Five general locations that are proposed for sampling are noted on the map of the following page. The number of samples for each location and rationale are mentioned below:

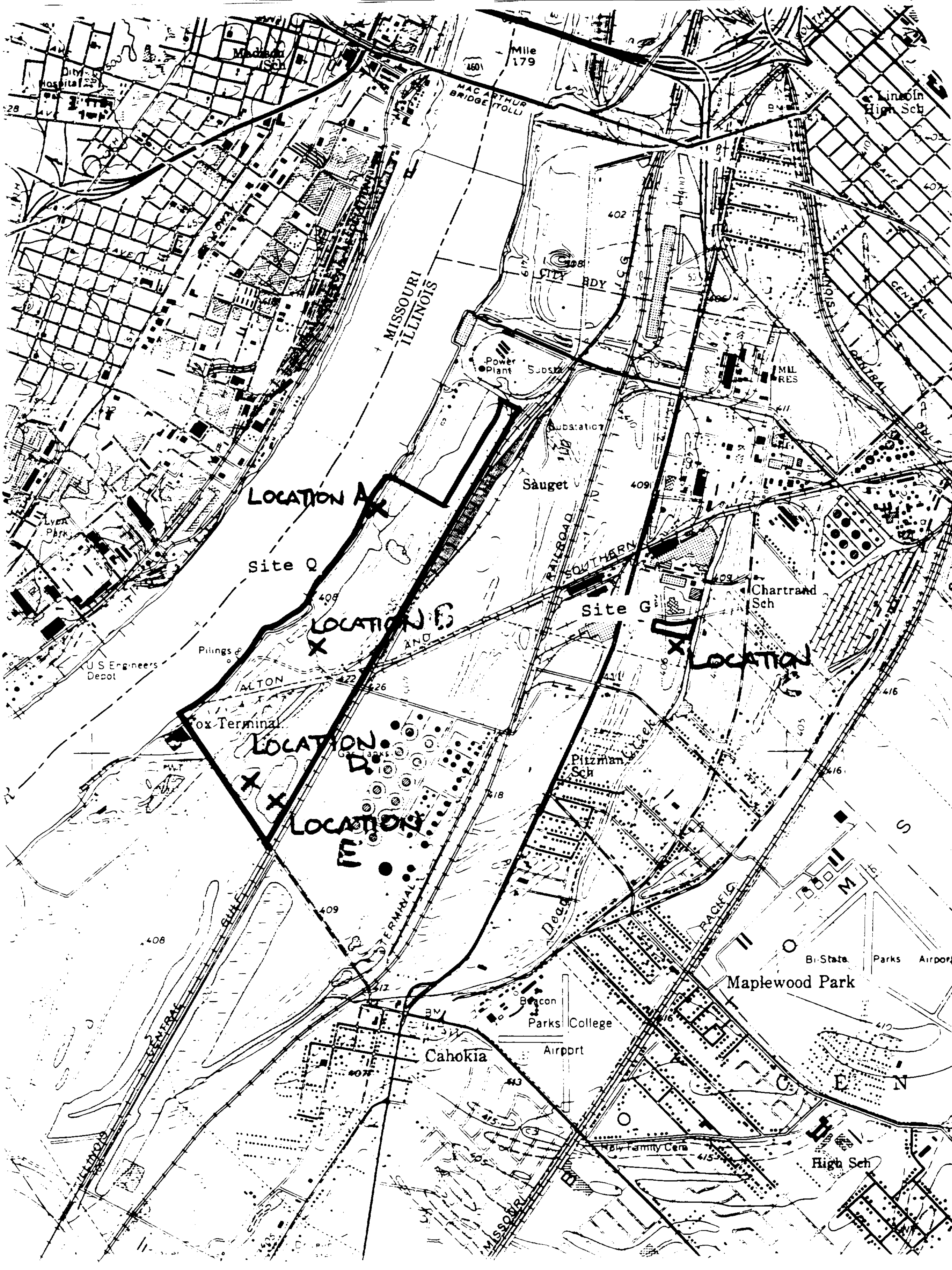
Location A - Two samples of waste materials found in several corroding drums. These drums are located about 300 feet south of Site R along the bank of the river. The waste materials appear to be inert with no unusual volatile vapors. Strong organic odors are periodically noted in the vicinity, but it is not known if they are coming from Site R or an unknown leachate seep along the river bank. The waste materials in the drums, which have never been sampled, were evidently disposed of with broken concrete and cinders and were present before the flood.

Location B - One sample in an isolated location at the south central portion of Site Q. The immediate vicinity shows stressed vegetation. Several blocks of a yellowish material resembling sulfur that has been seen at Site G and the borrow pits at the south end of this site were noted.

Location C - Two samples in a low-lying area to the south of Site G. This swampy area was impacted by high water table conditions that persisted during and shortly after last years flood. The rationale of sampling at this location is based on its proximity to very high levels of contaminants at the surface of Site G and the fact that contaminated sediment has likely been deposited into this area for years. Recent sampling results and activities associated with putting out underground fires at Site G have made knowing what may be present in sediments here a higher priority.

Location D - Four samples in the "southwest borrow pit". The Ecology & Environment report (1988), did not investigate a waste pile and a few drums of waste materials that were present in a low-lying area that is usually submerged. The waste pile contains a black oily material, blocks of yellow and dark grey crystalline substances and rubber gaskets. There are also drums present around the margins of the pit that should be sampled.

Location E - Seven samples in the larger "southeast borrow pit". As was the case at Location D, this area was never sampled. When the site was discovered three years ago, several corroded drums and waste materials were noted in piles and along ridges of this borrow pit. The grayish crystalline materials noted above are present, but in greater quantities. A very large pile of rusting drums and waste materials is present at the west-central portion of the pit and a ridge of waste materials is present in the north-central portions. Limited sampling around this pit has showed PCBs to be present in the 10-20ppm range.



LOCATION A
LOCATION B
LOCATION C
LOCATION D
LOCATION E
Site Q
Site G
MISSOURI
ILLINOIS
MAC ARTHUR BRIDGE (TOLL)
Mile 179
Power Plant
Substa
Substation
Sauget
CITY BDY
Chartrand Sch
Pitzman Sch
Fox Terminal
Gas Tanks
Pilings
U S Engineers Depot
Lyon Park
City Hospital
Madison Sch
Lincoln High Sch
Bi-State Parks Airport
Maplewood Park
Beacon
Parks College Airport
Cahokia
Holy Family Cem
High Sch
ALTON
SOUTHERN
RAILROAD
TERMINAL
Dead Creek